

1.0 INTRODUCTION

The Kentucky Transportation Cabinet (KYTC) initiated the I-75 to US 27 Corridor Scoping Study in July 2007 to examine the need for and feasibility of a new highway connector from I-75 to US 27 in the Jessamine, Fayette, and/or Madison County area. Transportation issues such as safety, access, mobility, and travel time were examined. In addition, long range transportation system, land use, environmental and other local and regional issues and concerns were also evaluated with respect to the need for and location of a new connector. Along with the examination of a new corridor between I-75 and US 27, the study also examined what type of roadway facility and project funding / financing options were applicable to the proposed project.

Members of the project team included: KYTC District 7, KYTC Central Office Division of Planning, the Bluegrass Area Development District (BGADD), and the Lexington Area Metropolitan Planning Organization (LAMPO). KYTC selected the consulting firm of Parsons Brinckerhoff (PB) to lead the study effort. PB is supported by HDR Engineering, Inc., Third Rock Consultants, LLC, Cultural Resource Analysts, Inc., and H. Powell and Company.

1.1 Study Objectives

Based on the initial direction provided by the KYTC, six primary study objectives were developed as summarized below.

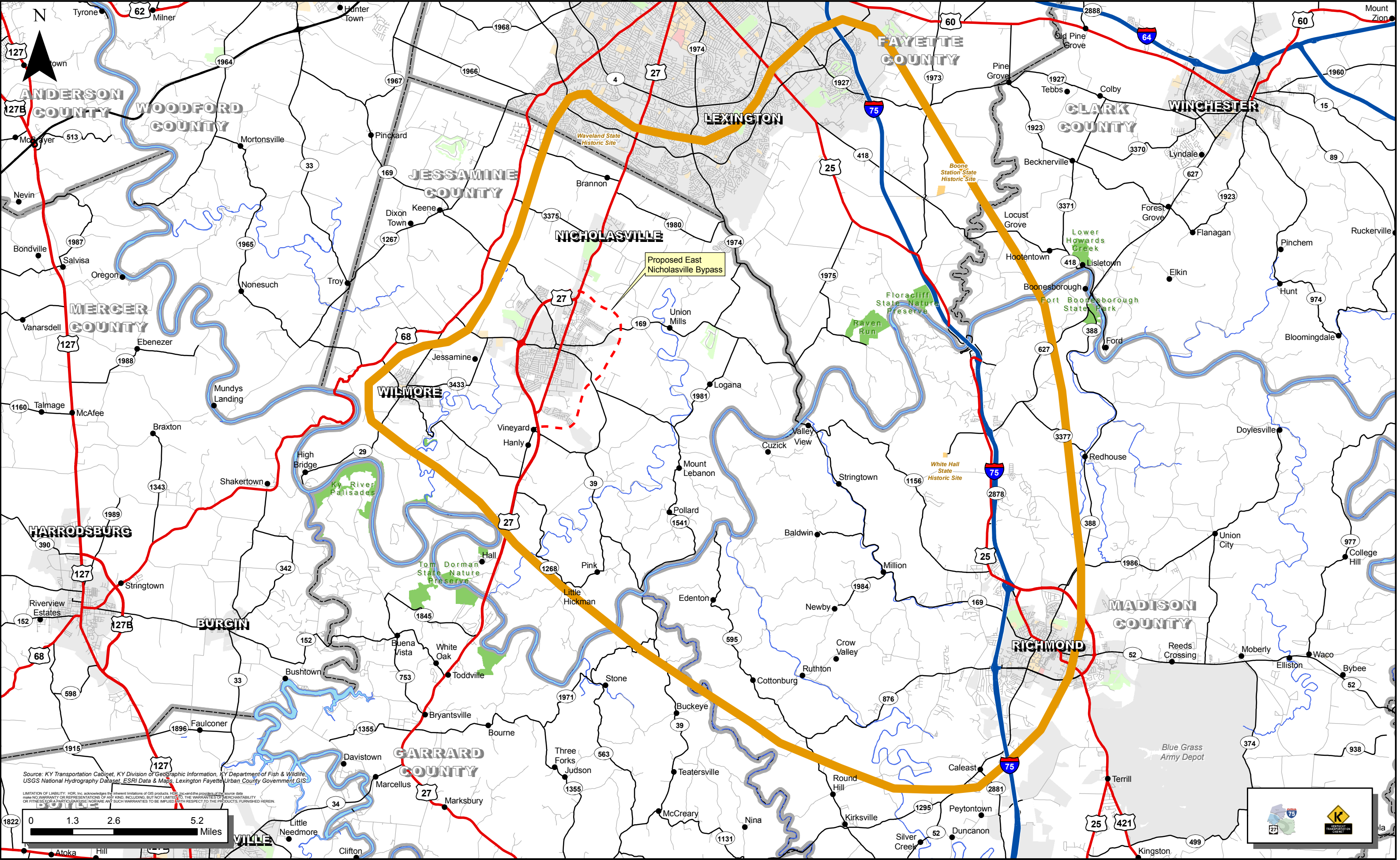
1. Examine existing traffic, highway, environmental, and geotechnical conditions in the study area;
2. Determine where (or if) there are problems or deficiencies;
3. Define project purpose and need;
4. Develop a range of alternates (including a no-build option) to satisfy the project purpose and need and address the identified problems;
5. Evaluate and compare all the proposed alternates, considering public input as well as transportation, community, environmental, and economic benefits and impacts; and
6. Recommend an alternate or set of alternates for implementation, if they are warranted and feasible.

While KYTC has the ultimate responsibility for constructing and maintaining safe and efficient highways, KYTC desires to incorporate public and agency input into the evaluation and decision-making process. Therefore, all six of these study objectives were completed in coordination with a comprehensive public and agency involvement program.

1.2 Project Location and Study Area

The study area is between I-75 and US 27 in Fayette, Jessamine, and Madison Counties. Refer to **Figure 1** for more details. The study area limits on the east and west were based on the project description. Historically scoping and feasibility studies to address connectivity from I-75 to areas west of US 27 have been met with much public opposition.

Figure 1: Study Area



1.3 Study Process

The study process used to evaluate potential alternates consisted of four major elements: 1) Define the purpose and need of the study, 2) Develop alternates, 3) Evaluate the alternates, and 4) Recommend an alternate(s).

The subsequent chapters in this report follow these steps, beginning with the development of the purpose and need for the study. The following five chapters contain the technical analysis and documentation used to confirm the purpose and need and then develop the alternates. These chapters include an analysis of existing and future No-Build highway conditions, a review of related studies, a summary of the human environment, a summary of the natural environment, and a geotechnical overview.

In addition to the technical analysis, public input and feedback was gathered throughout the study process. The framework for including the public in the study process is presented in the section following the technical analysis. Next, the discussion of the alternates development procedure and evaluation is presented. The final stage in the study process was to provide a recommendation, which is also the final section in this report.